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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,921	03/01/2002	Timothy P. Goggins	NG-31336	3798
22202	7590	02/10/2004		
WHYTE HIRSCHBOECK DUDEK S C 555 EAST WELLS STREET SUITE 1900 MILWAUKEE, WI 53202			EXAMINER KOYAMA, KUMIKO C	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	Application No.	Applicant(s)	
	09/683,921	GOGGINS, TIMOTHY P.	
	Examiner	Art Unit	
	Kumiko C. Koyama	2876	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Kumiko C. Koyama. (3) Diane Lee.  
 (2) Mr. John D'Antico. (4) \_\_\_\_\_.

Date of Interview: 28 January 2004.

Type: a) ☒ Telephonic b) ☐ Video Conference  
 c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
 If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1 and 43.

Identification of prior art discussed: Clay (US 4,869,946).

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The Applicant's representative, Mr. D'Antico, submitted a draft amendment and discussed the Applicant's invention in comparison with the prior art Clay. Upon reviewing of the draft amendment and discussing the instant invention, the examiners expressed their opinions regarding the claims and suggested possible amendments to the claims. The examiner will examine the instant Application accordingly upon receipt of the formal response.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Kumiko C. Koyama  
 Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



WHYTE  
HIRSCHBOECK  
DUDEK S.C.

## FAX COVER SHEET

L-IV

January 27, 2004

## TO:

Examiner Koyama  
Tim Goggins

## FACSIMILE NO.:

(571) 273-2394  
(262) 781-1378

## FROM:

John H. D'Antico, Esq. (0401)

## PAGES:

11 (including cover page)

## CLIENT-MATTER:

7845/32

Please see the attached Draft Response.

MKE/907338.1

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PATENT RESPONSE

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application: 09/683,921  
Filing Date: March 1, 2002  
Inventor: Timothy P. Goggins  
Title: Lenticular Bar Code Image  
Examiner: Kumiko Koyama  
Art Unit: 2876  
Autony Docket: NG-31336 (07845.0032)  
Confirmation No.: 3798  
Customer No.: 022202

**CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10**

I hereby certify that, on the date shown below, this correspondence is being:

**Mailing**

☐ deposited with the U.S. Postal Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**37 CFR 1.8(a)****37 CFR 1.10**

☐ with sufficient postage as first class mail ☐ As "Express Mail Post Office to Addressee" Mailing Label No. \_\_\_\_\_

**Transmission**

☒ transmitted by facsimile to Fax No. (571) 273-2394 addressed to Examiner Koyama at the U.S. Patent and Trademark Office.

Date: \_\_\_\_\_

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DRAFT RESPONSE**

Dear Sir:

For non-binding, non-prejudicial discussion purposes only, please see the attached proposed amended claims, which we will look forward to discussing with you telephonically on Wednesday, January 28, 2004 at 9 a.m. EST. In the meantime, your particular attention is also directed to new Claims 43-45.

## PATENT RESPONSE

PROPOSED AMENDED CLAIMS

1. (original) A lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a back surface opposite the front surface; and  
an image joined to the back surface of the lens, the image including a bar code symbol having bars;  
wherein the lenticular lens and the image are in overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens.
2. (original) The lenticular bar code image of Claim 1 wherein the lenticular bar code angle is in a range from 0 to 360 degrees.
3. (original) The lenticular bar code image of Claim 1 wherein the lenticular bar code angle is in a range from 0 to 90 degrees.
4. (original) The lenticular bar code image of Claim 1 wherein the bars of the bar code symbol are skewed with respect to the lenticules of the lenticular lens.
5. (original) The lenticular bar code image of Claim 1 wherein the bars of the bar code symbol are perpendicular to the lenticules of the lenticular lens.
6. (original) The lenticular bar code image of Claim 1 wherein the bars of the bar code symbol are not aligned with the lenticules of the lenticular lens.
7. (original) The lenticular bar code image of Claim 1 wherein the bar code symbol is readable through the lenticules of the lenticular lens by a bar code reader.
8. (original) The lenticular bar code image of Claim 7 wherein the bar code reader is a scanner.

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9. (original) The lenticular bar code image of Claim 7 wherein the bar code reader is one of: a contact reader, a moving beam scanner, a fixed beam scanner, and a hand-held scanner.

10. (previously amended) The lenticular bar code image of Claim 7 wherein the bar code symbol has an American National Standards Institute readability grade of at least a C.

11. (original) The lenticular bar code image of Claim 1 wherein the bar code symbol is a Universal Product Code (UPC) symbology.

12. (original) The lenticular bar code image of Claim 1 wherein the lenticules of lenticular lens have a width of less than about 0.006667 inches.

13. (original) The lenticular bar code image of Claim 12 wherein the lenticules of lenticular lens have a focal length and a gauge thickness and wherein the focal length is substantially equal to the gauge thickness.

14. (original) The lenticular bar code image of Claim 13 wherein the gauge thickness is less than about 10 mils.

15. (original) The lenticular bar code image of Claim 1 wherein the lenticular lens includes at least 150 lenticules per inch (LPI).

16. (original) The lenticular bar code image of Claim 1 wherein the bar code symbol is one of a Code 39 symbology, an Interleaved 2 of 5 symbology, a Codabar symbology, a Code 128 symbology, a Code 93 symbology, and a Postnet symbology.

17. (original) The lenticular bar code image of Claim 1 wherein at least one of the plurality of lenticules overlays more than one bar of the bar code symbol.

18. (original) The lenticular bar code image of Claim 1 wherein the image is printed directly to the flat back surface of the lenticular lens.

## PATENT RESPONSE

19. (original) The lenticular bar code image of Claim 1 wherein the image is printed onto the lenticular lens by one of: sheet-fed printing, web-offset printing, flexographic printing, gravure printing, digital printing, and electronic deposition.

20. (original) The lenticular bar code image of Claim 1 wherein the image is not printed onto the lenticular lens by a photographic printing process.

21. (original) The lenticular bar code image of Claim 1 wherein the image is printed onto the lenticular lens by one of: sheet-fed printing, web-offset printing, flexographic printing, gravure printing, digital printing, inkjet and electronic deposition.

22. (original) The lenticular bar code image of Claim 1 further comprising a substrate such that the image is disposed between the lenticular lens and the substrate.

23. (original) The lenticular bar code image of Claim 22 further wherein the image is printed to the substrate.

24. (original) The lenticular bar code image of Claim 23 wherein the image is printed onto the substrate by one of: sheet-fed, web-offset, flexographic, gravure, digital printing, inkjet and electronic deposition.

25. (original) The lenticular bar code image of Claim 1 wherein the lens comprises an ultraviolet curable resin and a plastic material selected from the group consisting of: polyester vinyl, polycarbonate, polyvinyl chloride, polyethylene terephthalate, and amorphous polyethylene terephthalate.

26. (original) The lenticular bar code image of Claim 1 wherein the lens comprises an ultraviolet curable resin.

27. (original) The lenticular bar code image of Claim 1 wherein the lens comprises thermoplastic material.



## PATENT RESPONSE

28. (original) The lenticular bar code image of Claim 1 wherein the lens comprises plastic material.

29. (original) The lenticular bar code image of Claim 1 wherein the lens comprises electron beam, curable resin material.

30. (original) The lenticular bar code image of Claim 1 wherein the lenticular bar code image is applied to at least one of: a package, a cup, a container, and a label.

31. (previously amended) A lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and  
an image joined to the flat back surface of the lens, the image including a Universal Product Code bar code symbol having bars;

wherein the lenticular lens and the image are in overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens such that the bars are substantially perpendicular to the lenticules.

32. (previously amended) A lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and

an image lithographically printed directly to the flat back surface of the lens, the image including a Universal Product Code bar code symbol having bars;

wherein the lenticular lens and the image are in overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens such that the bars are substantially perpendicular to the lenticules; and

wherein the bar code symbol is readable through the lenticules of the lenticular lens by a bar code reader.

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33. (previously amended) A lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and  
an image lithographically printed directly to the flat back surface of the lens, the image including a Universal Product Code bar code symbol having bars;  
wherein the lenticular lens and the image are in overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens such that the bars are substantially perpendicular to the lenticules;  
wherein the bar code symbol is readable through the lenticules of the lenticular lens by a bar code reader; and  
wherein the bar code symbol remains substantially visible despite any movement of the lenticular bar code image.

34. (previously amended) A label comprising:  
a label substrate; and  
a lenticular bar code image attached to the label substrate, the lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and  
an image joined to the flat back surface of the lens, the image including a bar code symbol having bars;  
wherein the bar code symbol is rotated to define a bar code rotation angle between the bars of the bar code symbol and the lenticules of the lenticular lens.

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35. (previously amended) A container comprising:  
a container substrate; and  
a lenticular bar code image attached to the container substrate, the lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and  
an image joined to the flat back surface of the lens, the image including a bar code symbol having bars;  
wherein the bar code symbol is rotated to define a bar code rotation angle between the bars of the bar code symbol and the lenticules of the lenticular lens.

36. (currently amended) A exp product comprising:  
a exp product substrate; and  
a lenticular bar code image attached to the exp product substrate, the lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and  
an image joined to the flat back surface of the lens, the image including a bar code symbol having bars;  
wherein the bar code symbol is rotated to define a bar code rotation angle between the bars of the bar code symbol and the lenticules of the lenticular lens.

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37. (previously amended) A package comprising:  
a package substrate; and  
a lenticular bar code image attached to the package substrate, the lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and  
an image joined to the flat back surface of the lens, the image including a bar code symbol having bars;  
wherein the bar code symbol is rotated to define a bar code rotation angle between the bars of the bar code symbol and the lenticules of the lenticular lens.

38. (original) A method of making a lenticular bar code image, the method comprising:  
providing a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface;  
providing a lenticular bar code image, the image including a bar code symbol having bars; and  
joining the lenticular bar code image to the flat back surface of the lens, thereby creating a bar code offset angle between the bars of the bar code symbol and the lenticules of the lenticular lens.

39. (original) The method of Claim 38 wherein the lenticules are not parallel to the spaced apart elements of the bar code.

40. (original) The method of Claim 38 wherein the lenticules are normal to the spaced apart elements of the bar code.

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41. (original) A method of reading a lenticular bar code image, the method comprising:  
providing a lenticular bar code image, the lenticular bar code image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a back surface opposite the front surface; and  
an image joined to the back surface of the lens, the image including a bar code symbol having bars;  
wherein the lenticular lens and the image are in overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens; and  
reading the lenticular bar code image through the lenticules of the lenticular lens with a bar code reader

42. (original) A lenticular image comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a flat back surface opposite the front surface; and  
an image joined to the flat back surface of the lens, the image including a readable product identifier;  
wherein the readable product identifier is rotated to define a readable product identifier angle between the bars of the bar code symbol and the lenticules of the lenticular lens.

43. (new) A lenticular bar code image, comprising:  
a lenticular lens having a front surface including a plurality of lenticules and a back surface opposite the front surface; and  
an image joined to the back surface of the lens, the image including a bar code symbol having bars;  
wherein the lenticular lens and the image are in non-parallel overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens, the lenticular bar code angle formed by an intersection of a first line that is substantially parallel with the bars of the bar code symbol and a second line that is substantially parallel with the lenticules of the lenticular lens.

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44. (new) A lenticular bar code image, comprising:

a lenticular lens having a front surface including a plurality of lenticules and a back surface opposite the front surface; and

an image joined to the back surface of the lens, the image including a bar code symbol having bars;

wherein the lenticular lens and the image are in non-parallel overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens, the lenticular bar code angle formed by an intersection of a first line that is substantially parallel with the bars of the bar code symbol and a second line that is substantially parallel with the lenticules of the lenticular lens, thereby facilitating non-distorted viewing of the bar code symbol;

45. (new) A lenticular bar code image, comprising:

a lenticular lens having a front surface including a plurality of lenticules and a back surface opposite the front surface; and

an image joined to the back surface of the lens, the image including a bar code symbol having bars;

wherein the lenticular lens and the image are in non-parallel overlay relationship with one another such that a lenticular bar code angle is formed between the bars of the bar code symbol and the lenticules of the lenticular lens, the lenticular bar code angle formed by an intersection of a first line that is substantially parallel with the bars of the bar code symbol and a second line that is substantially parallel with the lenticules of the lenticular lens, thereby minimizing distortion of the bar code symbol as the bar code symbol appears through the lenticules of the lenticular lens.